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A NEW *ATAENIUS* FROM SOCORRO ISLAND, MEXICO (COLEOPTERA: SCARABAEIDAE: APHODIINAE)

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Abstract.—A new species of aphodiine scarab beetle, *Aphodius* **hoguei,** from Socorro Island, Mexico, is described, illustrated with line drawings and scanning electron micrographs, and compared with and distinguished from its closest relative.

The insect fauna of the eastern Pacific oceanic islands is still very poorly known in spite of the numerous zoological surveys made there during the last two centuries. Although many of the larger insects have been described from these islands, many of the smaller forms remain undescribed. Therefore, we were pleased to examine a series of a small aphodiine scarab beetle collected from Socorro Island by Charles L. Hogue and Arthur V. Evans when they participated in the Steele Expedition to the Islas Revillagigedo, Mexico, in 1977. These beetles were found to represent a new species of *Ataenius* and this species is described below.

Ataenius hoguei Cartwright and Spangler, New Species

Figs. 1–5

Holotype male.—Length 4.5 mm, width 2.0 mm. Convex, elongate; black; anterior angles of pronotum and legs reddish brown (Fig. 1).

Head moderately convex, sides weakly arcuate to rather sharply angled genae; clypeal margin finely reflexed, rounded each side of shallow median emargination (Fig. 2). Surface of head anterior to greatest convexity of the clypeus with close, very fine rugulae. Disc of head minutely punctate; punctures gradually more noticeable across the occipital area where they are still very fine and separated by 3 or 4× their diameter; with a deep fovea in front of and adjacent to each eye.

Pronotum 1.4 mm long, 2.0 mm wide; sides and base weakly arcuate, finely margined; short setae, separated by about their length, along entire lateral and posterior margin. Surface with scattered, moderate punctures; punctures slightly more numerous on anterior angles and diagonally poste-

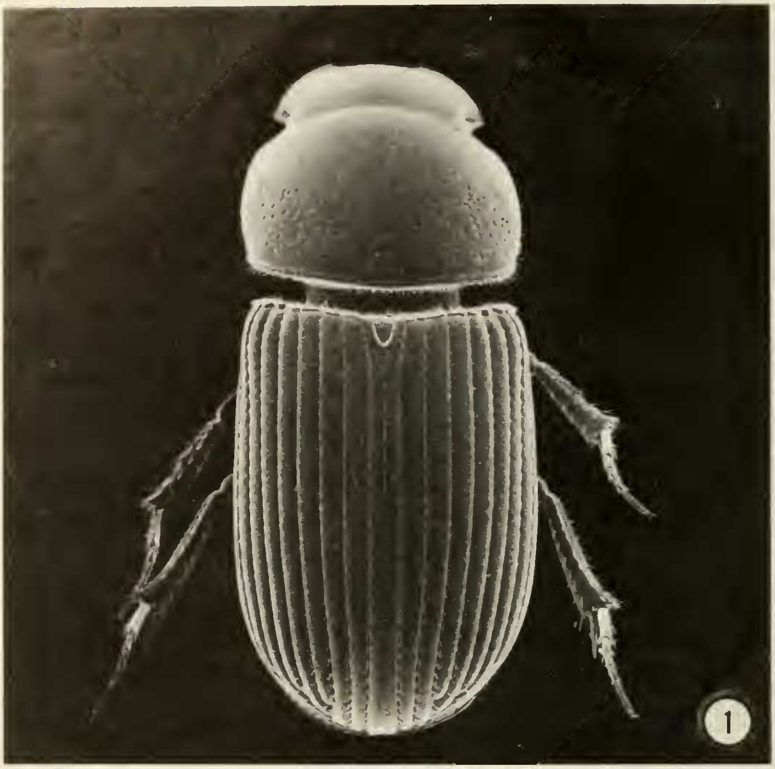


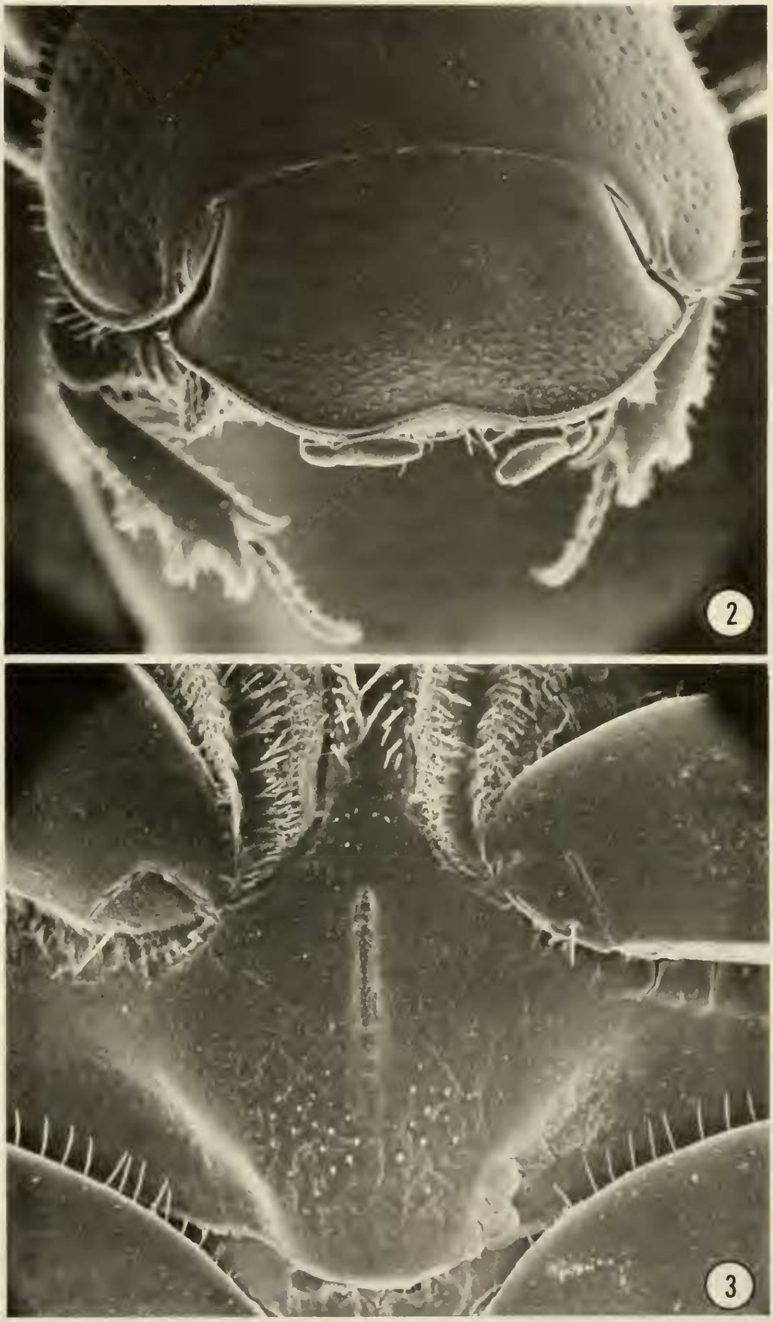
Fig. 1. *Ataenius hoguei*, habitus, 20×.

riorly toward middle of base; punctures gradually finer from middle to anterior margin.

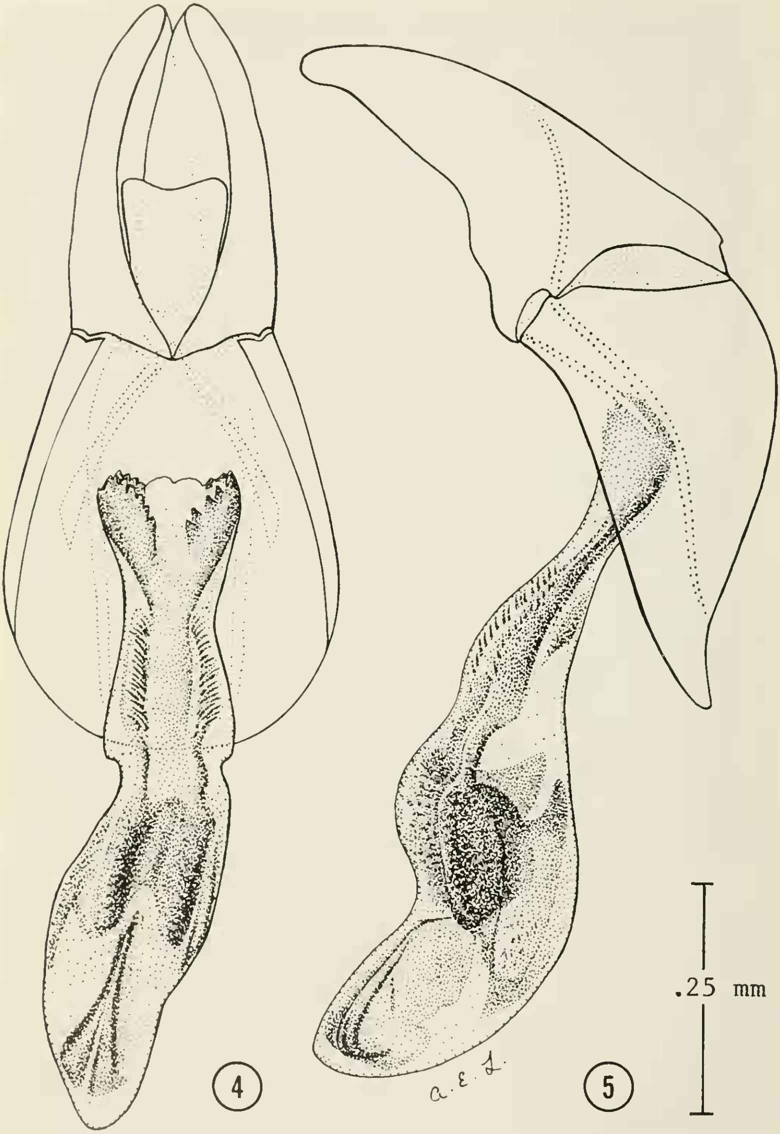
Elytra 3.0 mm long, 2.0 mm wide; humeri dentate; sides parallel; striae moderately deep and coarsely punctate; intervals very finely alutaceous, weakly convex, and appearing crenate because of strial punctures; intervals more strongly convex laterally and apically; humeral umbones almost smooth.

Metasternum shagreened; carinate between middle coxae; longitudinally grooved on midline, deeper anteriorly (Fig. 3); discal area flattened, punctate anteriorly, posterior ⅓ finely closely punctate.

Profemur shining and smooth, with perimarginal groove. Protibial spur of male hooked inward at tip. Mesofemur and metafemur shining and smooth, with 1 or 2 moderately coarse punctures at apices; ventrally with fine marginal line on apical ½. Metacoxae each with a large deep pit just anterior to juncture with femur. Metatibia with fringe of 6 fine short apical setae, a very short fine accessory spine, and an intervening seta next to terminal



Figs. 2, 3. *Ataenius hoguei*. 2, Head and protibia, 50×. 3, Metasternum, 75×.



Figs. 4, 5. *Ataenius hoguei*, male genitalia. 4, Ventral view. 5, Lateral view.

spurs; long spur subequal to 1st tarsal segment in length and about ⅓ the length of entire tarsus.

Abdominal segments slightly convex; with very fine, scattered punctures at middle; punctures becoming larger and more noticeable laterally; anterior marginal fluting about equal on anterior segments, slightly wider and deeper on terminal segment. Pygidium eroded over basal ½, leaving a wide convex shining apical lip.

Male genitalia as illustrated (Figs. 4, 5).

Allotype.—Length 4.9 mm, width 2.1 mm. Female differs from male in having a more distinct basal band of moderately fine close punctures, separated by 1 diameter or less, across the head; a normally straight anterior tibial spur; and slightly more noticeable alutaceous sculpture.

Type-data.—Holotype ♂: MEXICO: Socorro Island, Revillagigedo Arch., 5 June 1977, Steele Exped. 1977, Station 1, sea level, C. Hogue and A. Evans; deposited in Natural History Museum of Los Angeles County, California. Allotype same data as for holotype. Paratypes (11 ♂, 9 ♀), same data as holotype: 1 ♂ and 1 ♀ in British Museum (Natural History), London; 1 ♂ and 1 ♀ in the California Academy of Sciences, San Francisco; 2 ♂ in the Museum of Comparative Zoology; Harvard University; 2 ♂ and 2 ♀ in the Natural History Museum of Los Angeles County; 4 ♂ and 4 ♀ in the National Museum of Natural History, Smithsonian Institution; and 1 ♂ and 1 ♀ in the H. F. Howden collection.

Etymology.—We take pleasure in naming this species for Dr. Charles L. Hogue, the first named of the collectors.

Comparative notes.—*Ataenius hoguei* resembles *Ataenius wenzeli* Horn and will key to that species in the revision of the species of the United States and Canada by Cartwright (1974); however, in *A. hoguei* the elytra are generally less alutaceous, the intervals not as flat, the occipital band of punctures across the head are finer and less numerous (especially in the male), the apical fringe of the posterior tibia is shorter and finer, the accessory spine very short and fine, and the puncture or pit at the base of the posterior coxa is very coarse and noticeable.

Habitat.—Unknown; specimens were collected near the shore at Bahía Vargas Lozano where they were attracted to a 15-watt ultraviolet light at night.

ACKNOWLEDGMENTS

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Cartwright, O. L. 1974. *Ataenius, Aphotaenius,* and *Pseudoataenius* of the United States and Canada (Coleoptera: Scarabaeidae: Aphodiinae). Smithson. Contrib. Zool. No. 154, 106 pp. 24 figs., 3 pls.